

Applicable Country & Regions:

All Regions

Product Service Manual – Level 3

Service Manual for BenQ:

Projector/MX600

<9H.JAG77.13x>



Version: 00a

Date:2013/8/12

Notice:

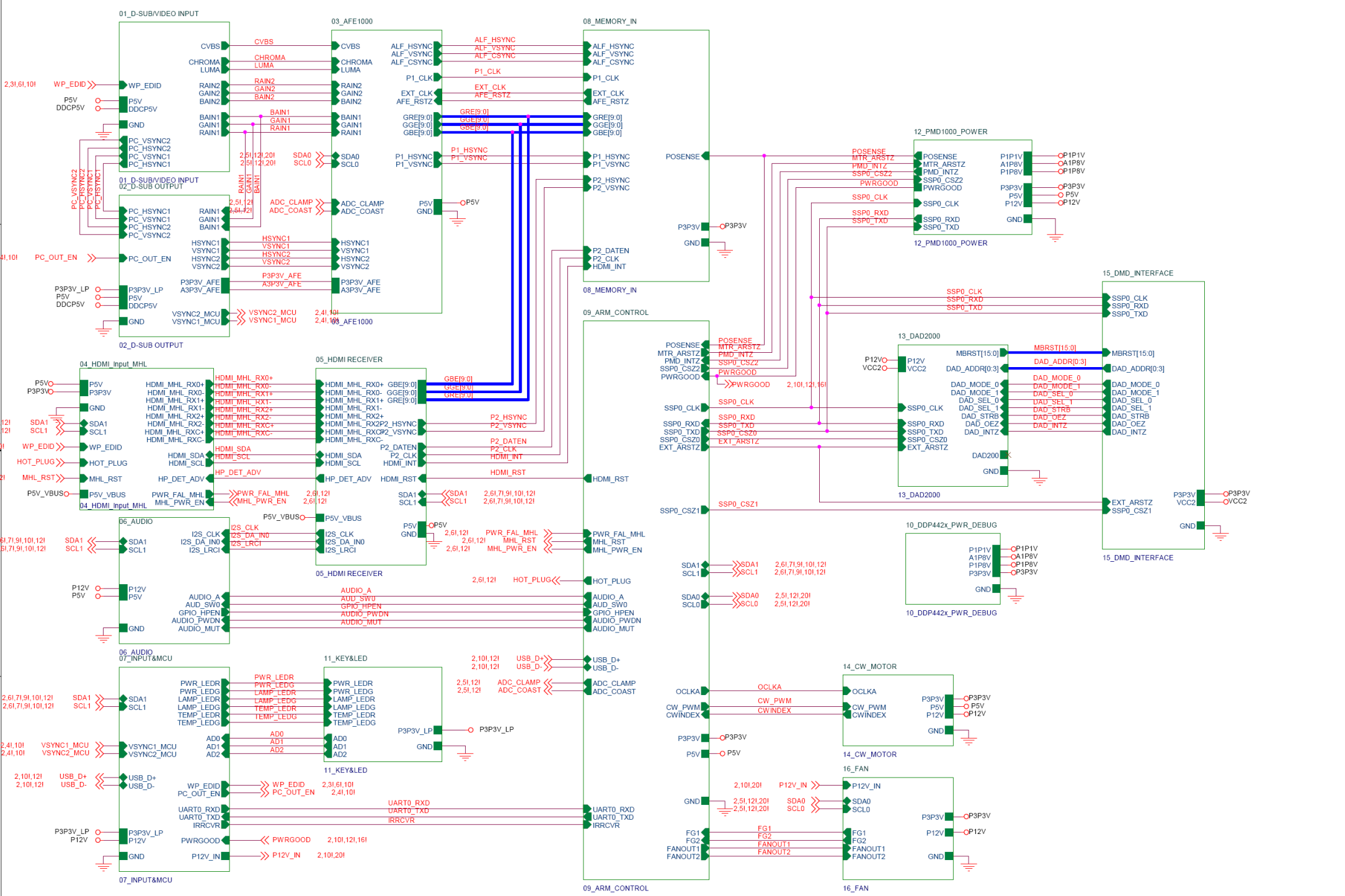
For RO to input specific “Legal Requirement” in specific NS regarding to responsibility and liability statements.

Please check BenQ’s eSupport web site, <http://esupport.benq.com>, to ensure that you have the most recent version of this manual.

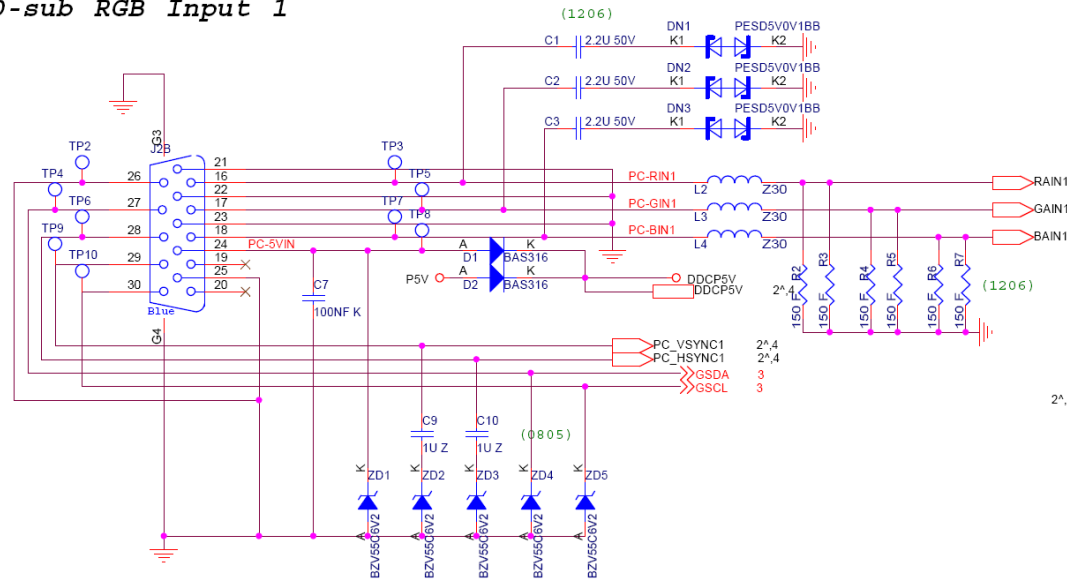
First Edition (Aug., 2013)

© Copyright BenQ Corporation 2013. All Right Reserved.

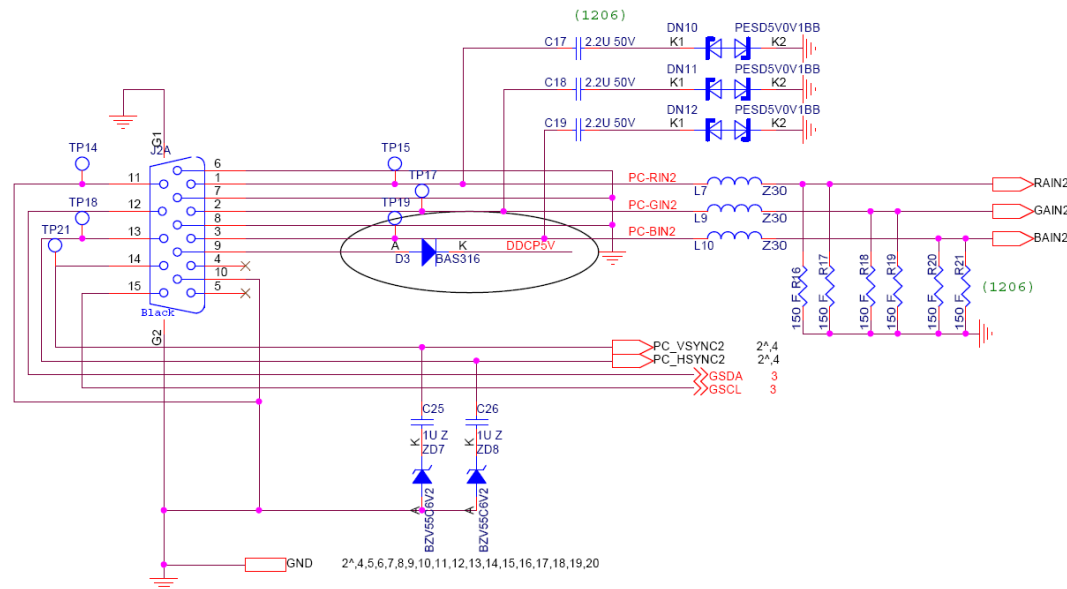
Schematics—Main board:



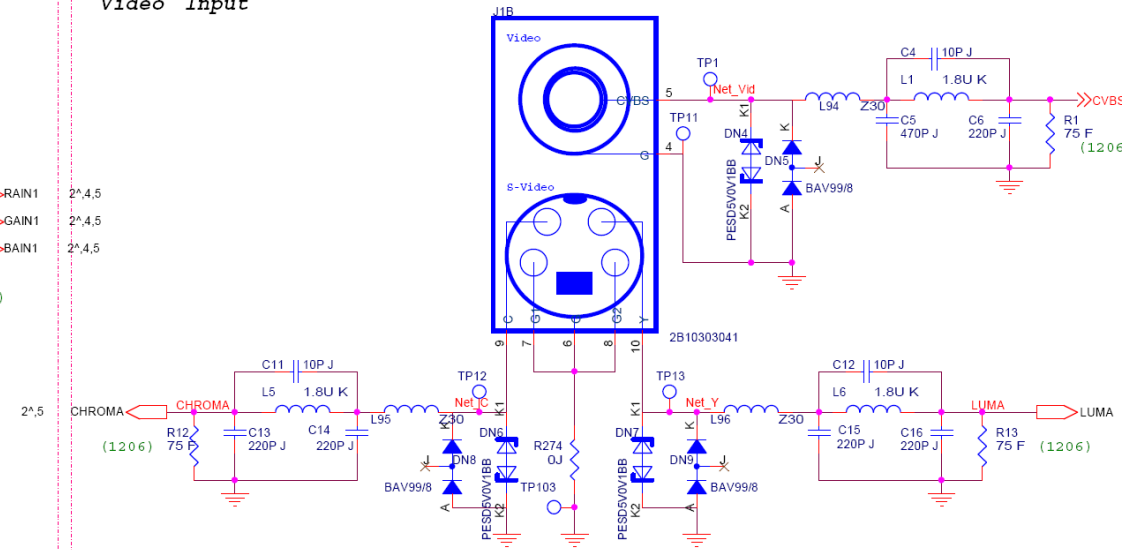
D-sub RGB Input 1



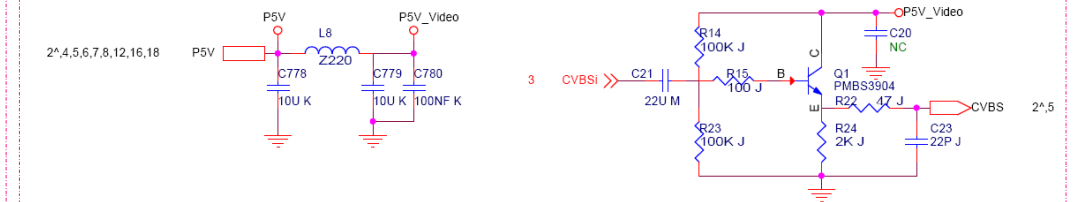
D-sub RGB Input 2



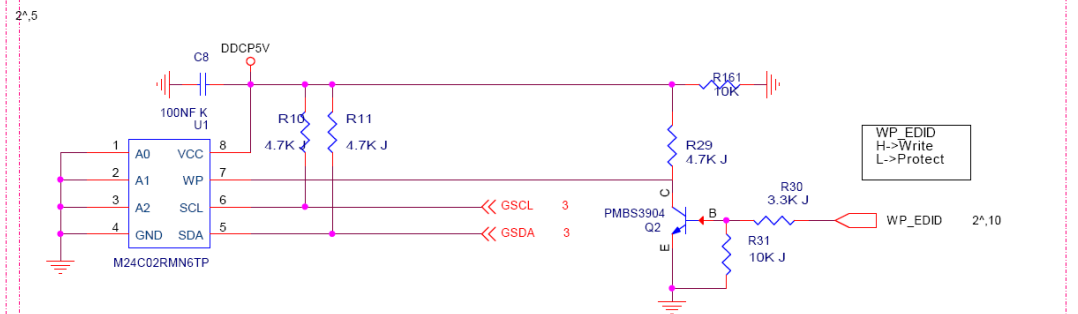
Video Input



Video Signal Driver



EEPROM



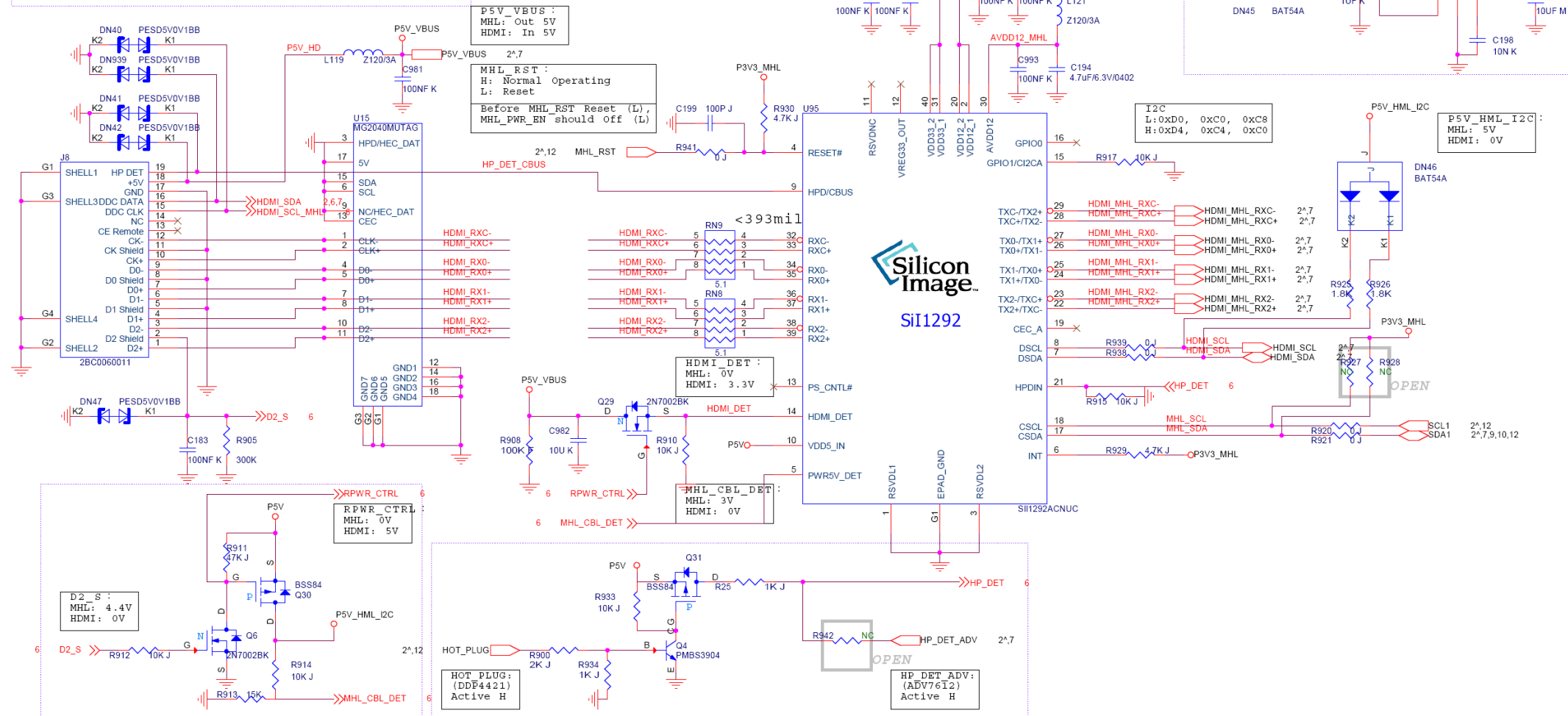
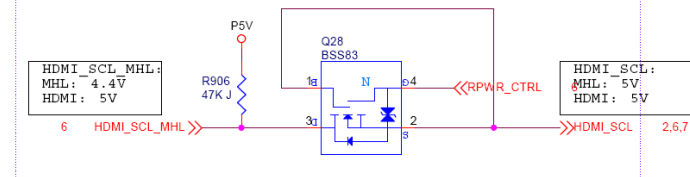
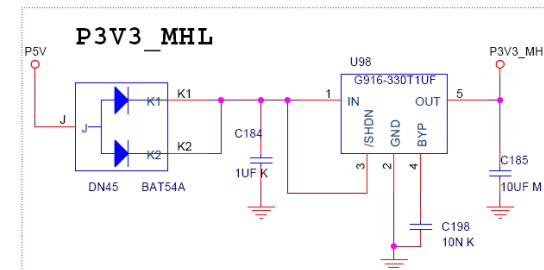
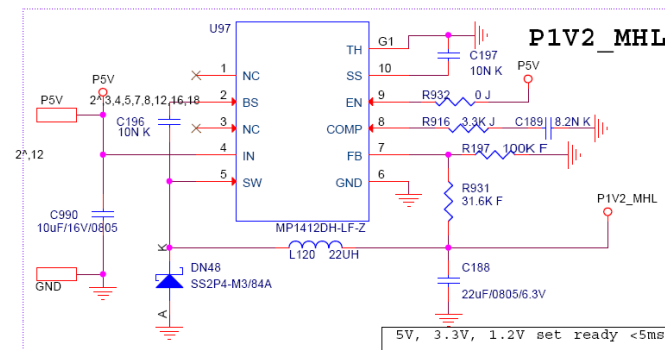
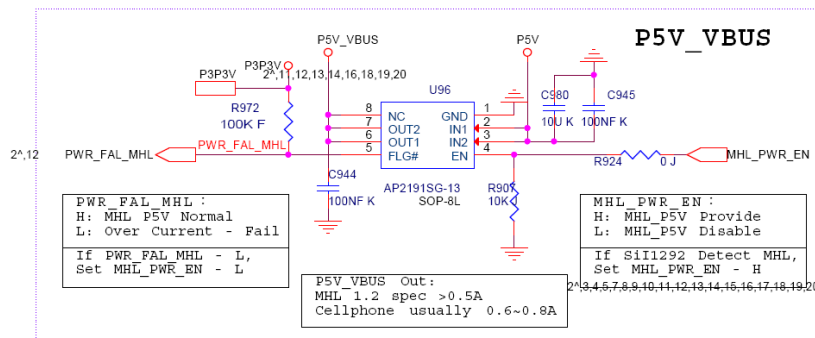
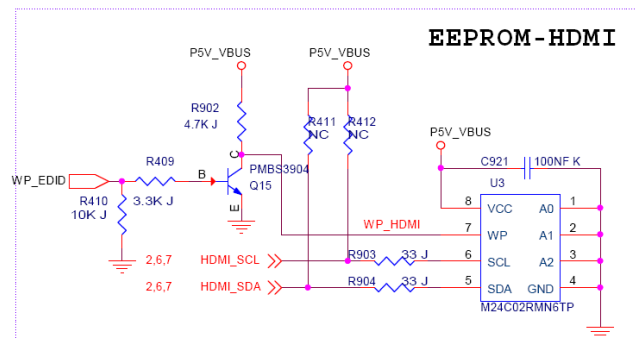
H1,V1 Buffer

The schematic diagram illustrates the H1,V1 Buffer circuit. It features two input signals, DDCP5V and PC_HSYNC1, which are connected to a buffer (U87) through resistors R829 and R830. The output of the buffer is connected to the HSYNC1 pin of the MCU (U7). The circuit also includes a power supply section with P3P3V_AFE and P3P3V_LP pins, connected to the MCU through resistors R833 and R834. The MCU (U7) is a 74AHC1G125GW, and the buffer (U87) is an SN74LVC2417DCKR. The circuit is powered by a 5V supply (DDCP5V) and a 3.3V supply (P3P3V_LP).

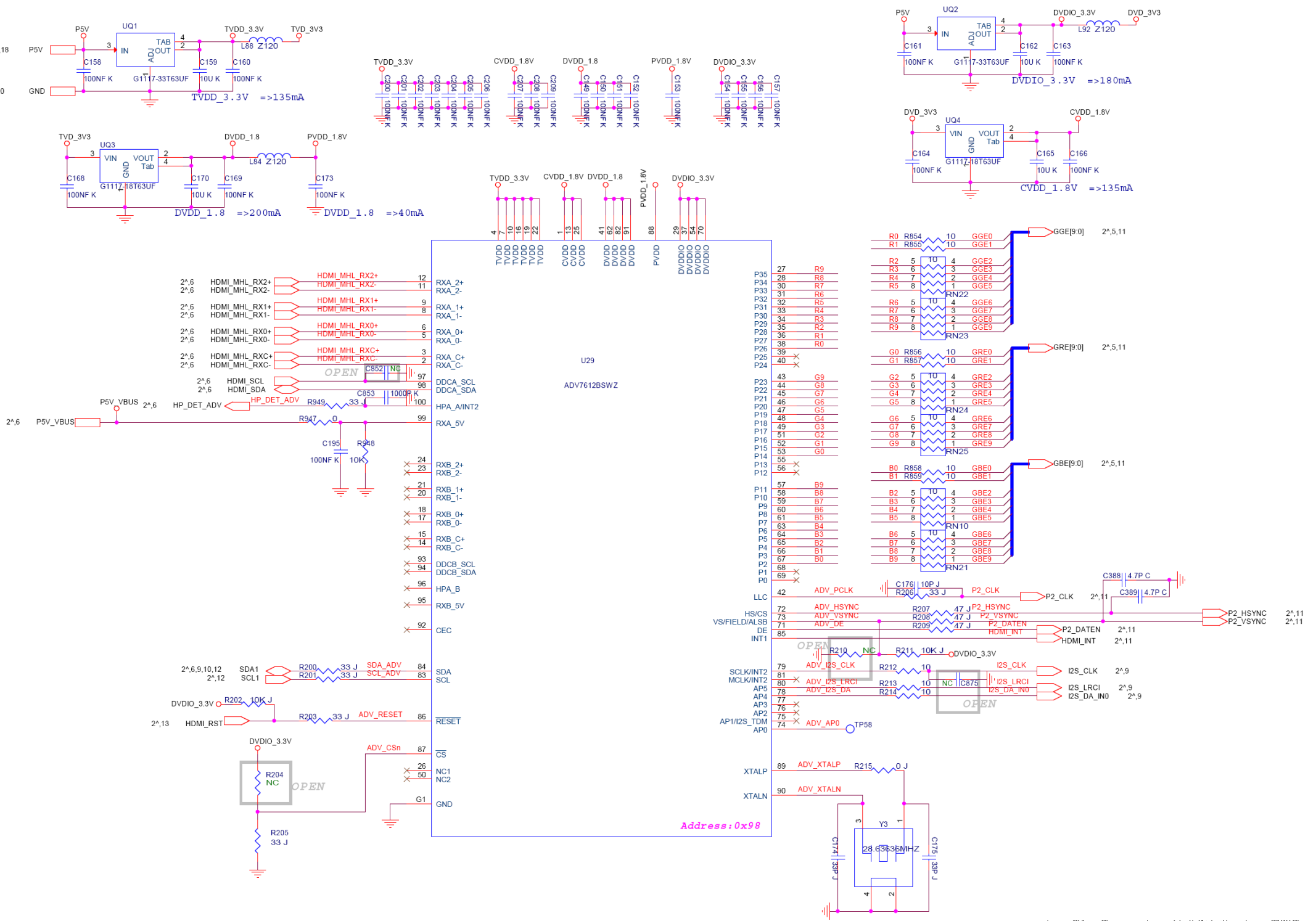
H2,V2 Buffer

The schematic diagram illustrates the H2,V2 Buffer circuit. It features two input signals, PC_HSYNC2 and PC_VSYNC2, each connected to a 4.7K resistor (R838, R842) and a 1K resistor (R839, R843) network. The signals are buffered by two comparators: U89 (SN74LVC2G17DCRR) and U8 (74AHC1G125GW). The output of U89 is HSYNC2 (2^5,5) and VSYNC2 (2^5,5). The output of U8 is VSYNC2_MCU (2^5,10). The circuit is powered by DDCP5V and P3P3V_AFE/P3P3V_LP, with decoupling capacitors C29, C30, C406, and C407.

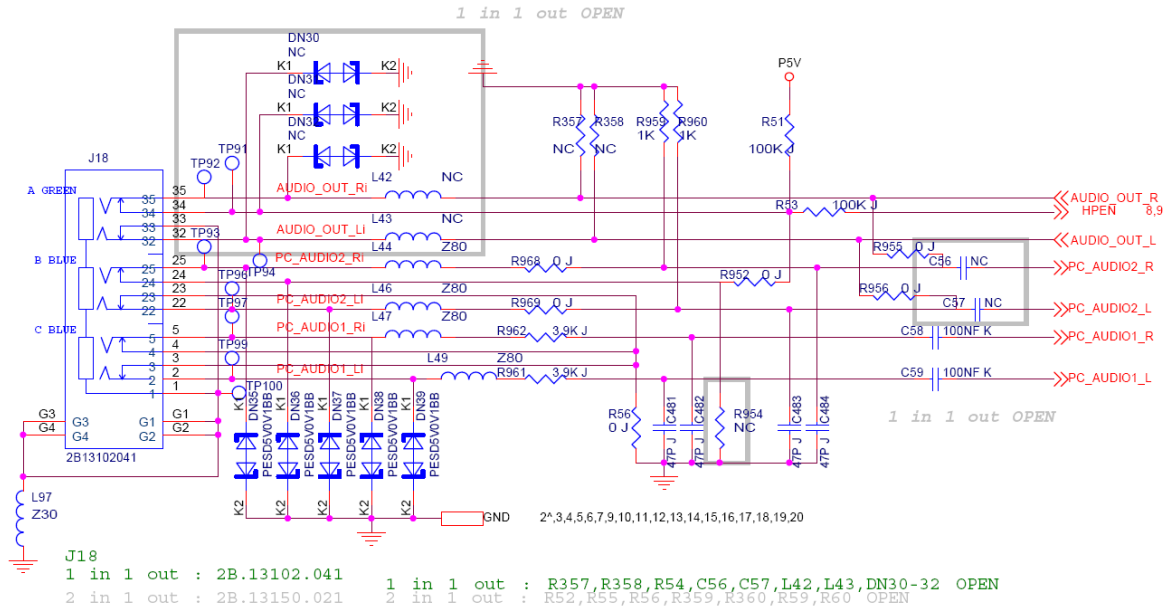
D-sub RGB Output



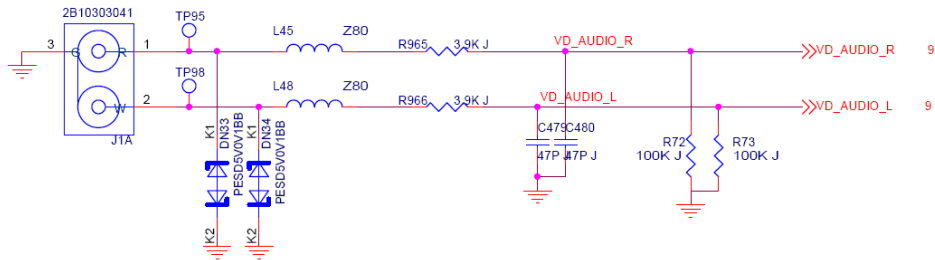
16,18
19,20



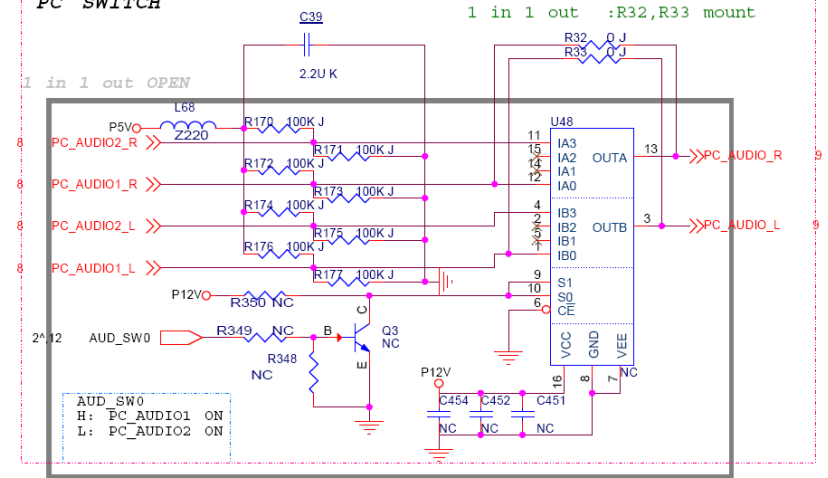
PC AUDIO IN/OUT



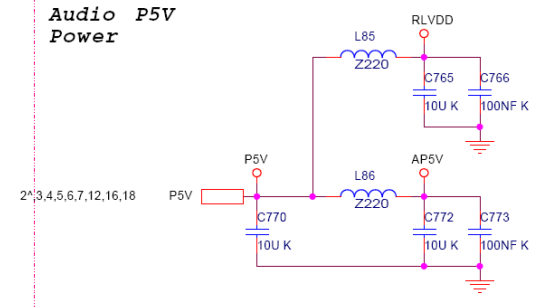
Video Audio Input



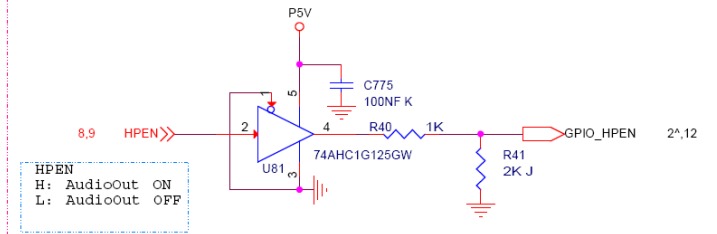
PC SWITCH

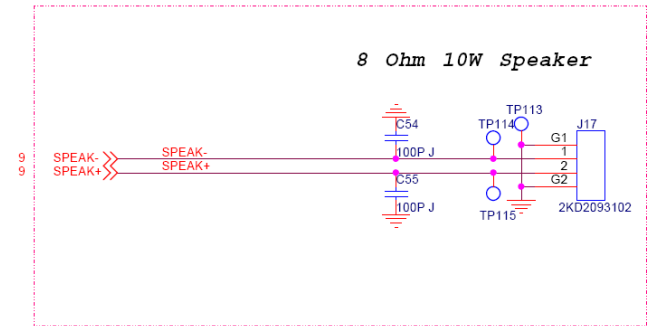


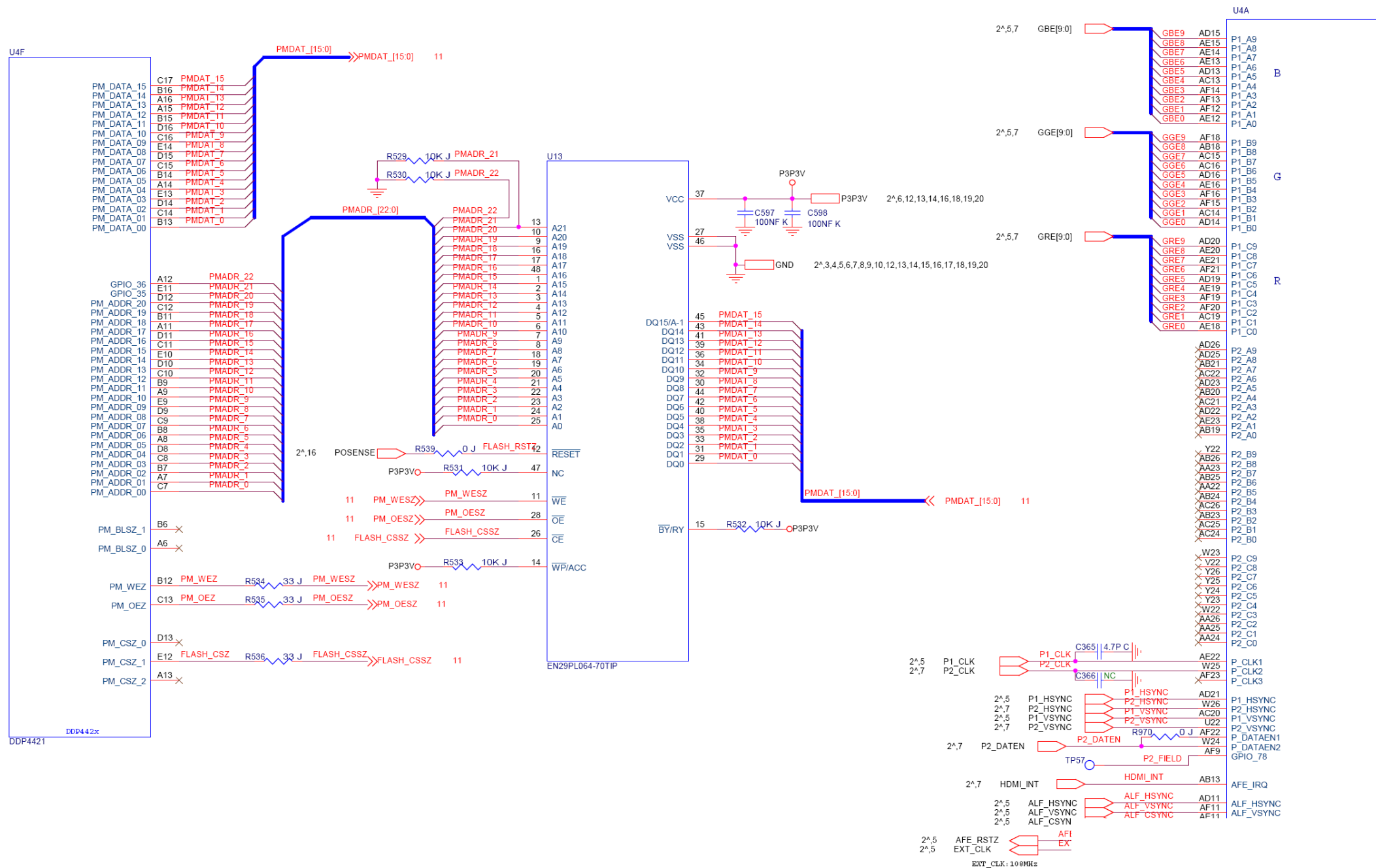
Audio P5V
Power

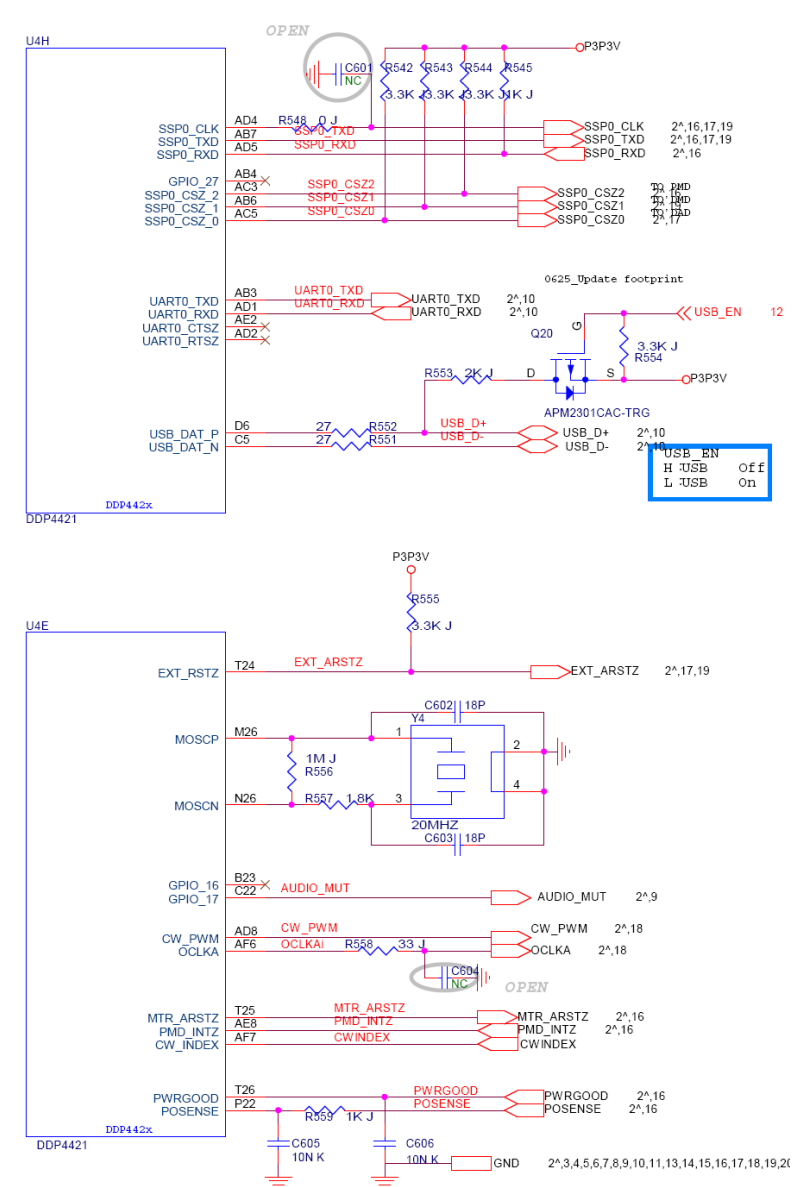
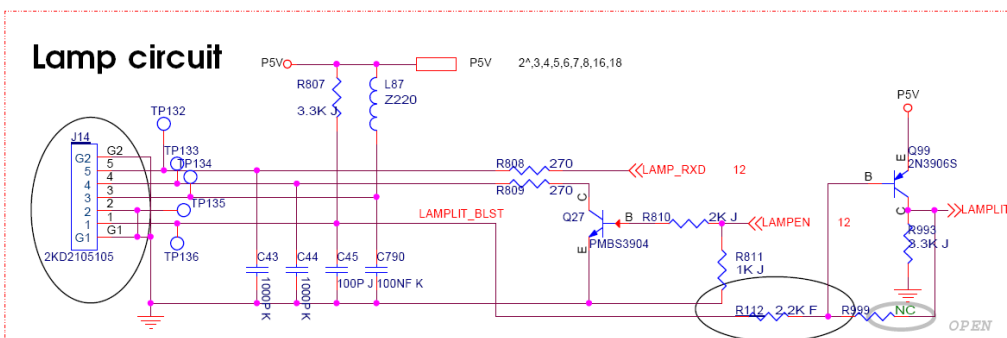


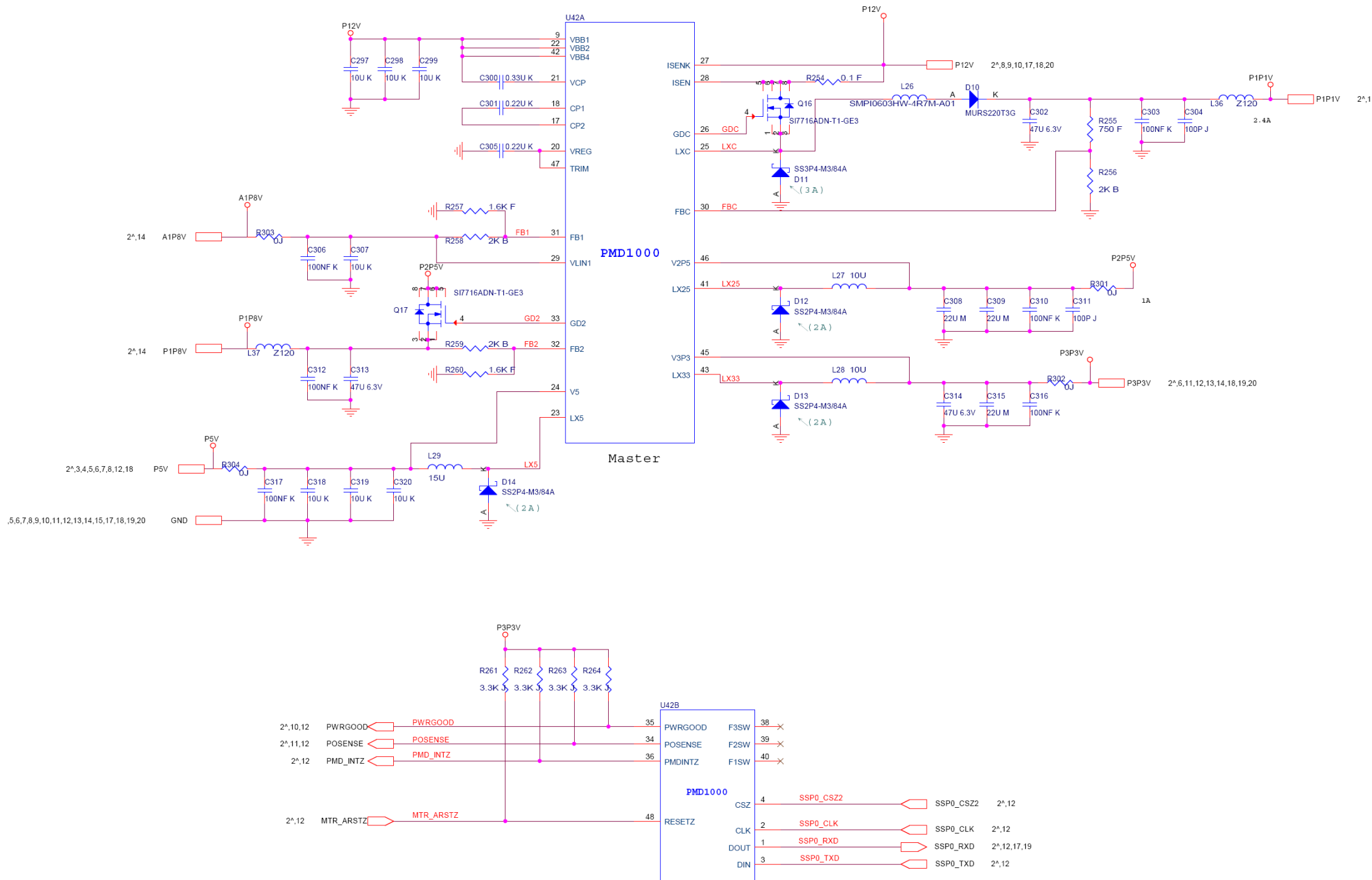
HPEN Level Shift

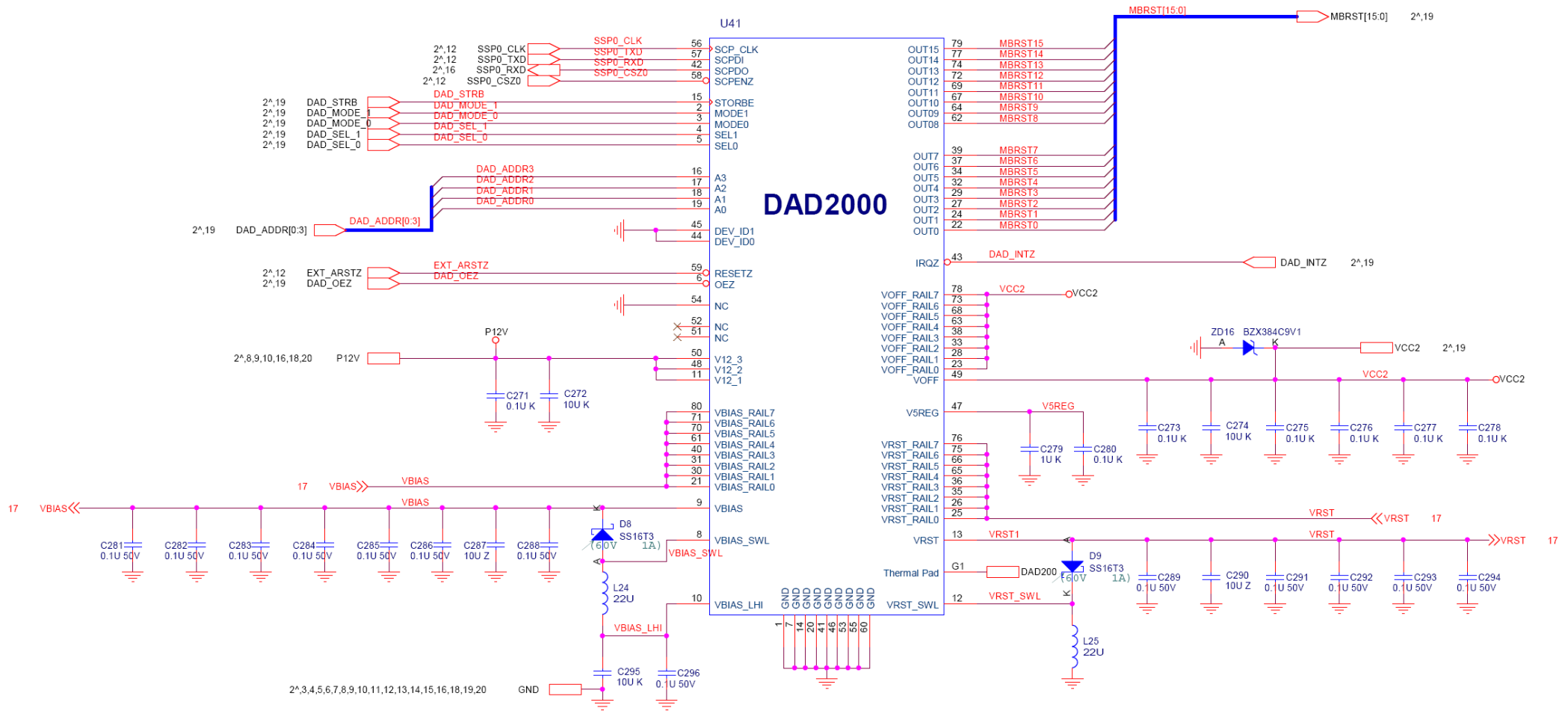


[illegible][illegible]



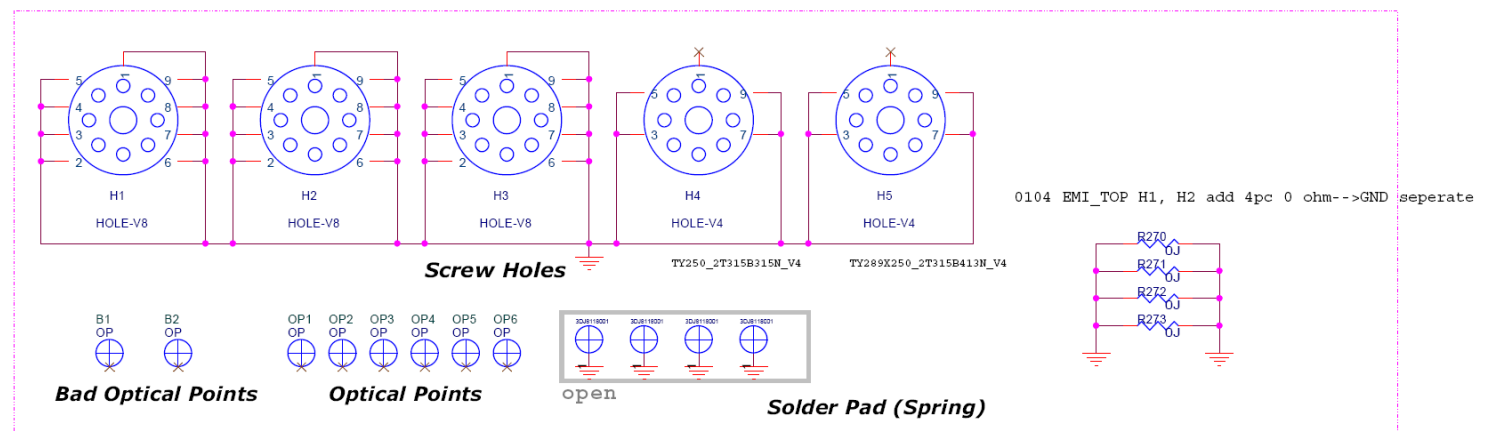
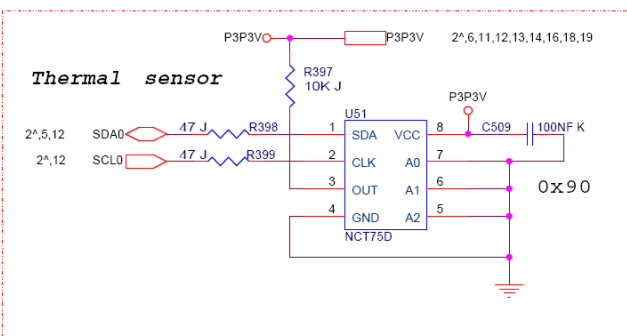
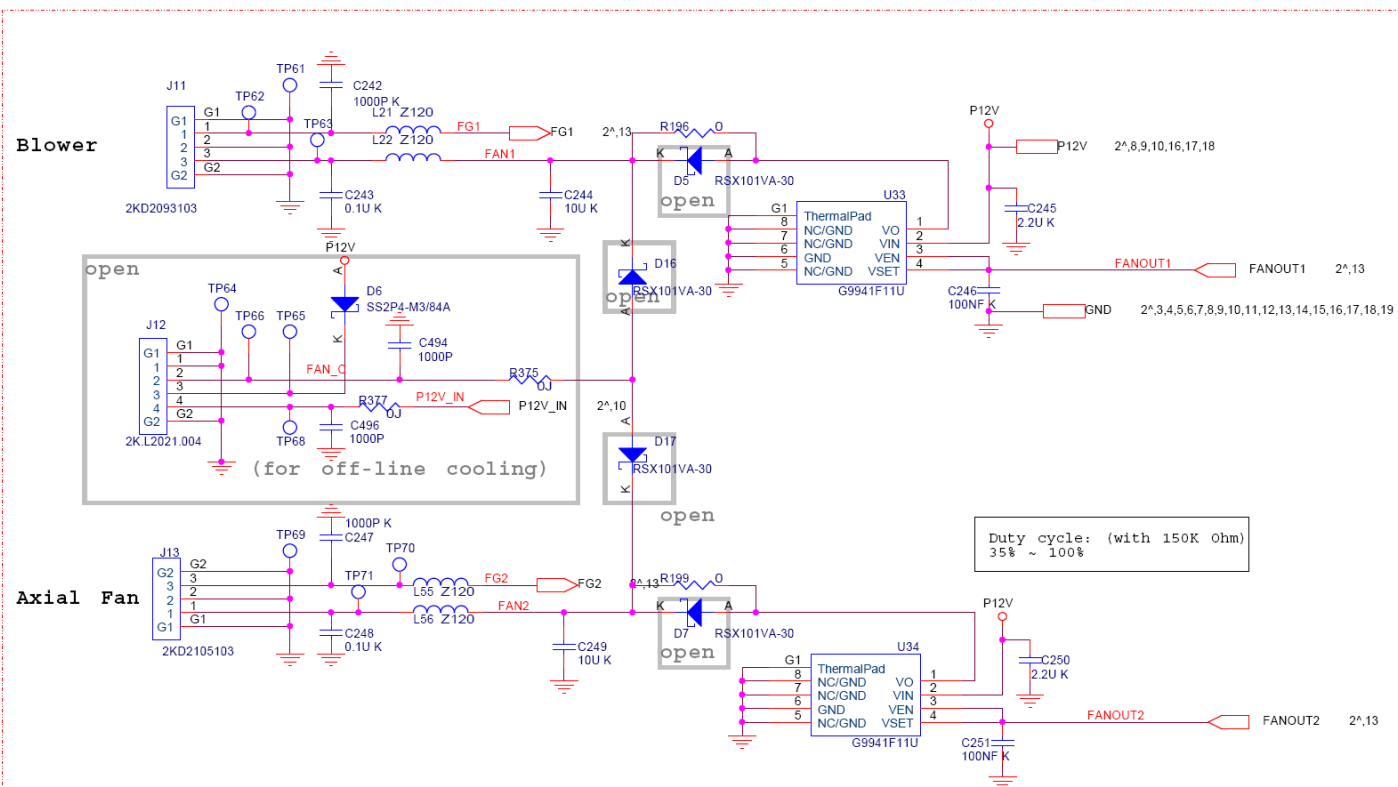




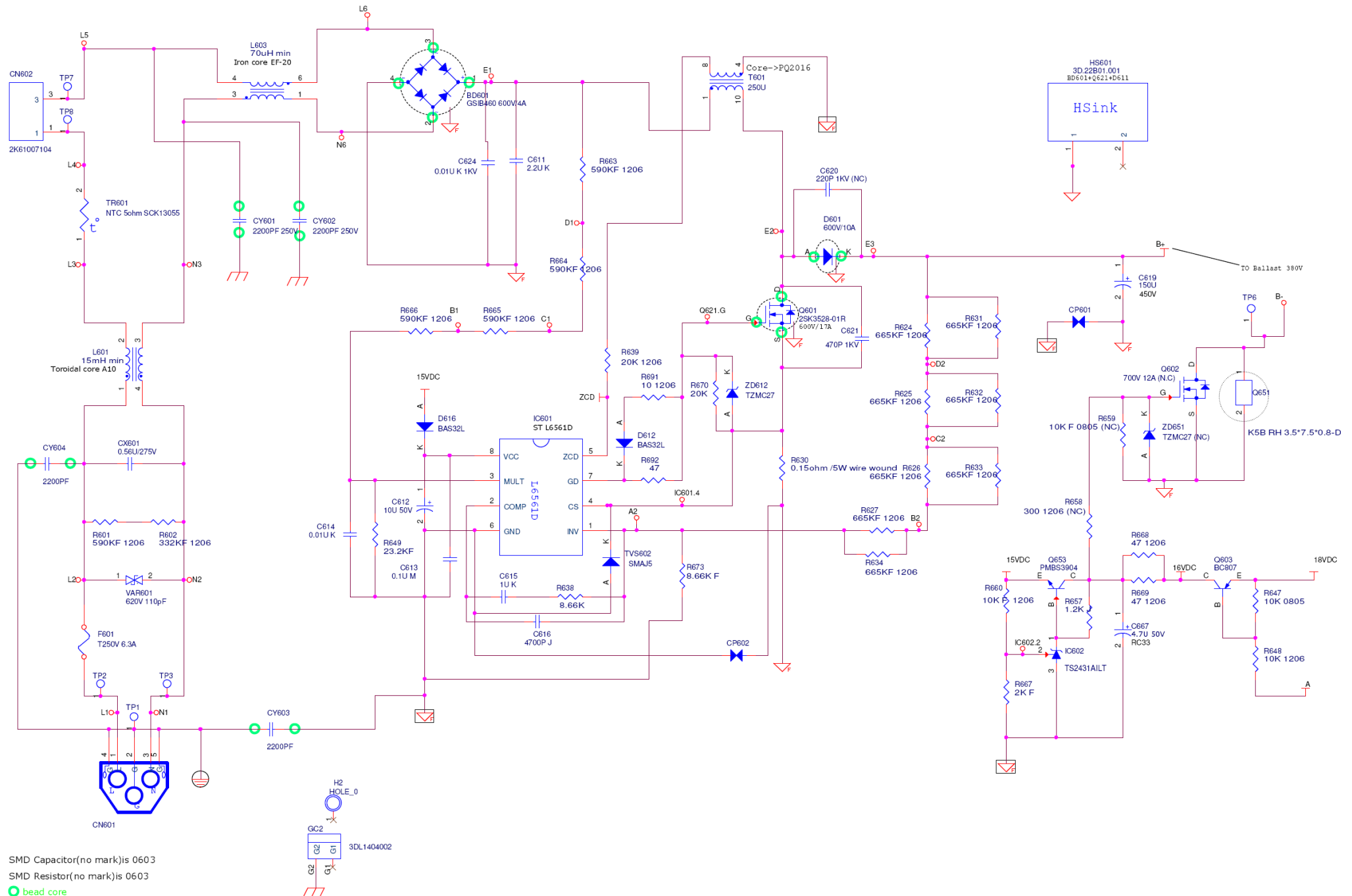


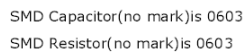
U4B



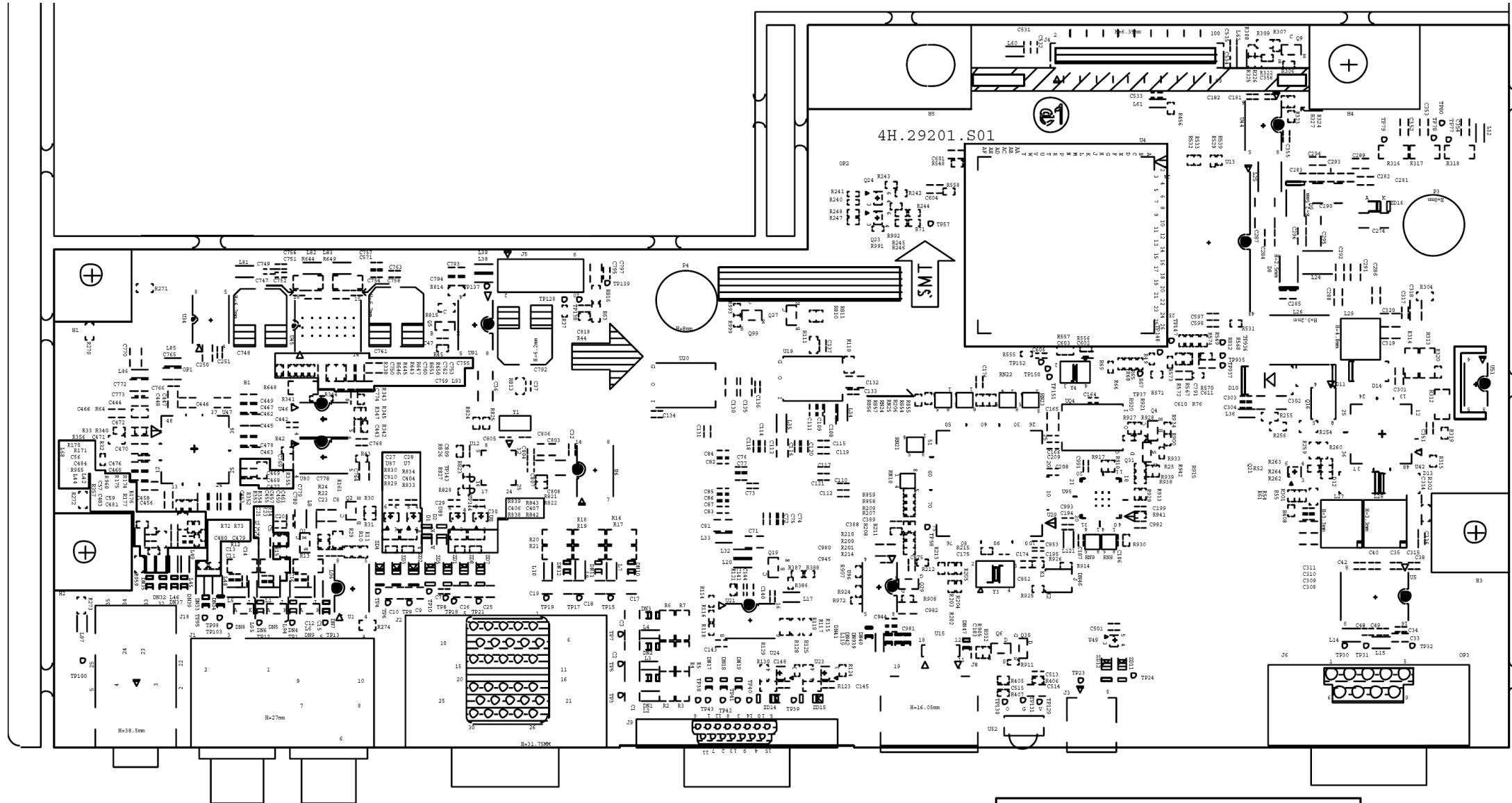


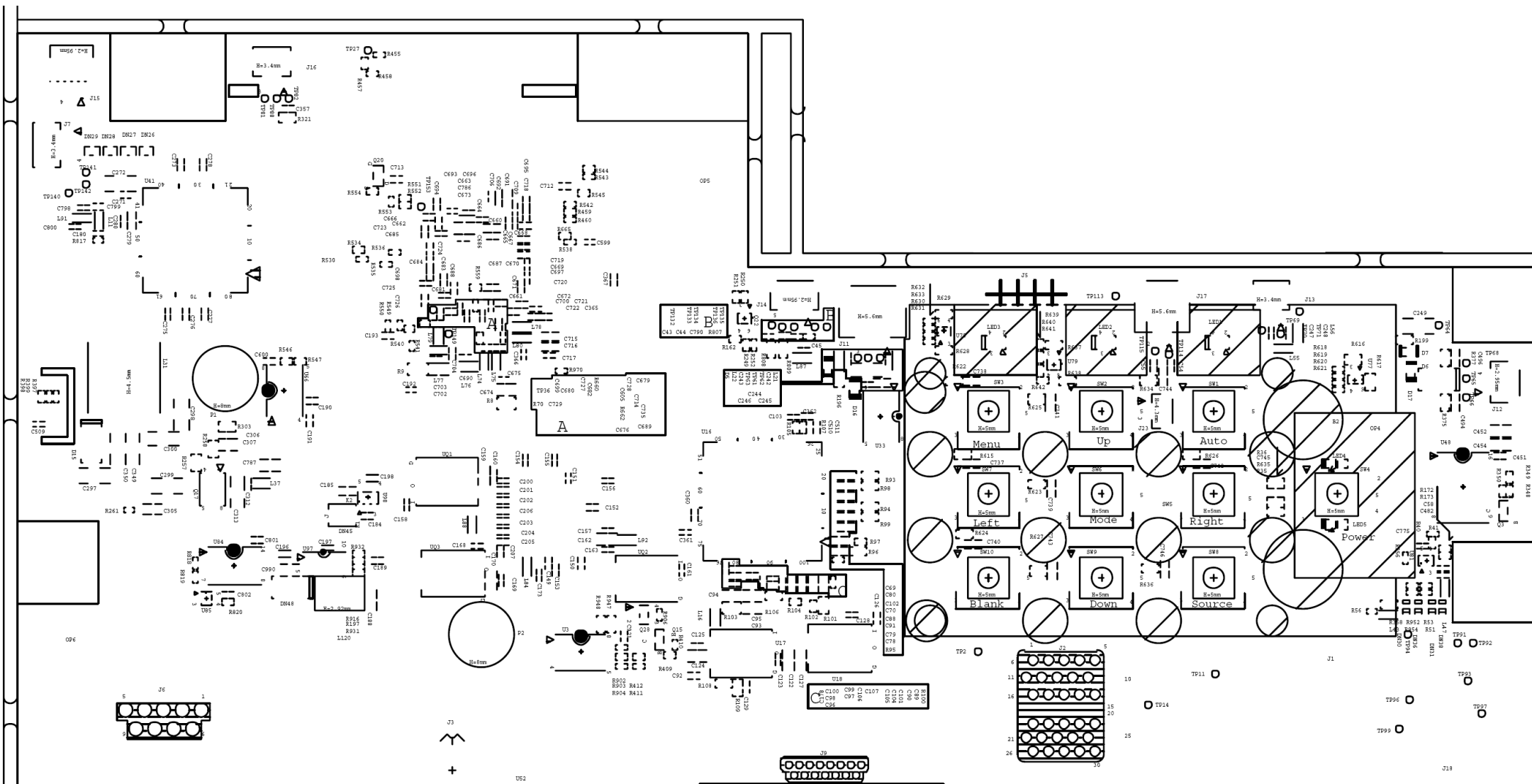
Power board:





PCB Artwork: Main Board





Power Board

